

Amendments to the Claims:

Please amend claims 1-20 in accordance with the list of claims that begins on the following page, and which replaces all prior versions of claims in the application.

List of Claims:

1. (currently amended) A [[tangible signal bearing medium]] storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for ensuring consistency of a group, the method comprising the following operations:

receiving a first list, wherein the first list identifies a first group of objects;

for each object identified in the first group, gathering a value of an attribute corresponding with the object, so each gathered attribute value is associated with a corresponding object identified in the first group;

storing, at a time t_1 , the first list that identifies the first group of objects, and the value of the attribute corresponding with each object in the first group of objects, to create a first snapshot of the first list that identifies the first group of objects and the attribute value corresponding with each object in the first group of objects;

after at least part of a task is performed, receiving a second list, wherein the second list identifies a second group of objects, and receiving, for each object identified in the second group, a value of the attribute corresponding with the object, so each received attribute value is associated with a corresponding object identified in the second group;

storing, at a time t_2 , the second list that identifies the second group of objects, and the value of the attribute corresponding with each object in the second group of objects, to create a second snapshot of the second list that identifies the second group of objects and the attribute value corresponding with each object in the second group of objects; and

comparing the first snapshot with the second snapshot.

2. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the operations further comprise failing the task if the first snapshot and the second snapshot are not the same.

3. (currently amended) The [[signal bearing]] storage medium of claim 2, wherein the comparing and failing operations comprise:

determining if all of the objects identified in the first list are identified in the second list
and if all of the objects identified in the second list are identified in the first list;

and if not, failing the task;

and if so, for each object identified in the first list, determining if the value of the
attribute corresponding with the object is the same as the value of the attribute
corresponding with the same object identified in the second list,

and if not, failing the task;

and if so, committing the task.

4. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the
attribute is a timestamp.

5. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the task
comprises backing up the objects identified in the first list.

6. (currently amended) The [[signal bearing]] storage medium of claim 5, wherein the
operation of performing at least part of the task comprises transmitting the objects identified in
the first list from at least one client to a backup storage server.

7. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the
attribute is size.

8. (currently amended) The [[signal bearing]] storage medium of claim 6, wherein the
operation of performing at least part of the task further comprises:

determining if all of the objects identified in the first list have been successfully stored on
a backup storage,

and if not, failing the task of backing up the objects identified in the first list.

9. (currently amended) The [[signal bearing]] storage medium of claim 8, wherein the
operation of failing the task comprises rolling back at least one commit by the server.

10. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the task comprises performing an installation.

11. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the task comprises performing a query.

12. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the first group is a Cross Transaction Logical Object Group.

13. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein t1 is before t2.

14. (currently amended) The [[signal bearing]] storage medium of claim 1, wherein the operation of receiving a first list comprises generating the first list.

15. (currently amended) The [[signal bearing]] storage medium of claim 14, wherein generating the first list comprises scanning a subset of a filesystem's directories.

16. (currently amended) The [[signal bearing]] storage medium of claim 14, wherein generating the first list comprises scanning at least one directory on each of a plurality of clients.

17. (currently amended) The [[signal bearing]] storage medium of claim 14, wherein the operation of receiving a second list comprises generating the second list.

18. (currently amended) The [[signal bearing]] storage medium of claim 17, wherein generating the second list comprises scanning a subset of a filesystem's directories.

19. (currently amended) The [[signal bearing]] storage medium of claim 17,
wherein the operations further comprise failing the task if the first snapshot and the
second snapshot are not the same; and

wherein the comparing and failing operations comprise:

determining if the first list and the second list identify the same objects;
and if not, failing the task;
and if so, for each object identified in the first list, determining if the value of the attribute corresponding with the object is the same as the value of the attribute corresponding with the same object identified in the second list,
and if not, failing the task;
and if so, committing the task.

20. (currently amended) A [[tangible signal bearing medium]] storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for ensuring consistency of a logical group, the method comprising the following operations:

generating a first list, wherein the first list identifies a first group of objects;
for each object identified in the first group, gathering the value of a timestamp corresponding with the object, so each gathered timestamp value is associated with a corresponding object identified in the first group;

storing, at a time t_1 , the first list that identifies the first group of objects, and the value of the timestamp corresponding with each object in the first group of objects, to create a first snapshot of the first list that identifies the first group of objects and the timestamp value corresponding with each object in the first group of objects;

waiting for at least part of a task of backing up the objects in the first group to be performed;

after at least part of the task is performed, generating, a second list, wherein the second list identifies a second group of objects, and receiving, for each object identified in the second group, a value of a timestamp corresponding with the object, so each received attribute value is associated with a corresponding object identified in the second group;

storing, at a time t_2 , the second list that identifies the second group of objects, and the value of the timestamp corresponding with each object in the second group of objects, to create a second snapshot of the second list that identifies the second group of objects and the timestamp value corresponding with each object in the second group of objects;

determining if the first list identifies the same objects as the second list;

and if not, failing the task;

and if so, for each object identified in the first list, determining if the value of the timestamp corresponding with the object is the same as the value of the timestamp corresponding with the same object identified in the second list,

and if not, failing the task;

and if so, committing the task.

21. (previously presented) A computing system, comprising:

a memory; and

a processing device coupled to the memory, wherein the processing device is programmed to perform operations for ensuring consistency of a group, the operations comprising:

receiving a first list, wherein the first list identifies a first group of objects;

for each object identified in the first group, gathering a value of an attribute corresponding with the object, so each gathered attribute value is associated with a corresponding object identified in the first group;

storing, at a time t_1 , the first list that identifies the first group of objects, and the value of the attribute corresponding with each object in the first group of objects, to create a first snapshot of the first list that identifies the first group of objects and the attribute value corresponding with each object in the first group of objects;

after at least part of a task is performed, receiving a second list, wherein the second list identifies a second group of objects, and receiving, for each object identified in the second group, a value of the attribute corresponding with the object, so each received attribute value is associated with a corresponding object identified in the second group;

storing, at a time t_2 , the second list that identifies the second group of objects, and the value of the attribute corresponding with each object in the second group of objects, to create a second snapshot of the second list that identifies the second group of objects and the attribute value corresponding with each object in the second group of objects; and

comparing the first snapshot with the second snapshot.

22. (original) The computing system of claim 21, wherein the operations further comprise failing the task if the first snapshot and the second snapshot are not the same.

23. (previously presented) The computing system of claim 22, wherein the comparing and failing operations comprise:

determining if all of the objects identified in the first list are identified in the second list and if all of the objects identified in the second list are identified in the first list;

and if not, failing the task;

and if so, for each object identified in the first list, determining if the value of the attribute corresponding with the object is the same as the value of the attribute corresponding with the same object identified in the second list,

and if not, failing the task;

and if so, committing the task.

24. (previously presented) The computing system of claim 21, wherein the attribute is a timestamp.

25. (previously presented) The computing system of claim 24, wherein the operation of receiving a first list that identifies objects in the first group comprises generating the first list, and the operation of receiving a second list that identifies objects in the second group after at least part of the task is performed comprises generating the second list.

26. (previously presented) A computing system, comprising:

means for receiving a first list, wherein the first list identifies a first group of objects;

means for, for each object identified in the first group, gathering a value of an attribute corresponding with the object, so each gathered attribute value is associated with a corresponding object identified in the first group;

means for storing, at a time t_1 , the first list that identifies the first group of objects, and the value of the attribute corresponding with each object in the first group of objects, to create a first snapshot of the first list that identifies the first group of objects and the attribute value corresponding with each object in the first group of objects;

after at least part of a task is performed, means for receiving, a second list, wherein the second list identifies a second group of objects, and receiving, for each object identified in the second group, a value of the attribute corresponding with the object, so each received attribute value is associated with a corresponding object identified in the second group;

means for storing, at a time t_2 , the second list that identifies the second group of objects, and the value of the attribute corresponding with each object in the second group of objects, to create a second snapshot of the second list that identifies the second group of objects and the attribute value corresponding with each object in the second group of objects; and

means for comparing the first snapshot with the second snapshot.

27. (previously presented) A method for ensuring consistency of a group, comprising the following operations:

receiving a first list, wherein the first list identifies a first group of objects;

for each object identified in the first group, gathering a value of an attribute corresponding with the object, so each gathered attribute value is associated with a corresponding object identified in the first group;

storing, at a time t_1 , the first list that identifies the first group of objects, and the value of the attribute corresponding with each object in the first group of objects, to create a first snapshot of the first list that identifies the first group of objects and the attribute value corresponding with each object in the first group of objects;

after at least part of a task is performed, receiving a second list, wherein the second list identifies a second group of objects, and receiving, for each object identified in the second group, a value of the attribute corresponding with the object, so each received attribute value is associated with a corresponding object identified in the second group;

storing, at a time t_2 , the second list that identifies the second group of objects, and the value of the attribute corresponding with each object in the second group of objects, to create a second snapshot of the second list that identifies the second group of objects and the attribute value corresponding with each object in the second group of objects; and

comparing the first snapshot with the second snapshot.

28. (original) The method of claim 27, wherein the operations further comprise:

performing at least part of the task; and
failing the task if the first snapshot and the second snapshot are not the same.

29. (previously presented) The method of claim 28, wherein the comparing and failing operations comprise:

determining if all of the objects identified in the first list are identified in the second list
and if all of the objects identified in the second list are identified in the first list;

and if not, failing the task;

and if so, for each object identified in the first list, determining if the value of the
attribute corresponding with the object is the same as the value of the attribute
corresponding with the same object identified in the second list,

and if not, failing the task;

and if so, committing the task.

30. (previously presented) The method of claim 29:

wherein the operation of receiving a first list that identifies objects in the first group
comprises generating the first list, and the operation of receiving a second list that identifies
objects in the second group after at least part of the task is performed comprises generating the
second list; and

wherein the task comprises backing up the objects identified in the first list.